

HABITAT & SETTLEMENT IN PREHISTORIC, HISTORIC & CONTEMPORARY PERSPECTIVES

This strategic research initiative supports research focused on assessing long-term change from prehistory to the present day. Anatolia has one of the best-defined long-term records of settlement during the Holocene period, and its study is central to a range of questions in prehistory, including the changing relationships of humans with the environment, the formation of large-scale settlements and shifts in urban-rural relationships. Developments in the Black Sea coastal region sometimes ran parallel to changes in Türkiye, but followed a different course at other periods, creating interesting comparisons, parallels and alternatives. Of particular interest are mankind's attempts to live in as well as adapt to and change conditions set by the environment through time and also the effect of human beings on their natural environment and landscape.

doi:10.18866/biaa2023.17

Agriculture in the highlands: Rabati, Georgia

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Eastern Anatolia and the Caucasus share many archaeological traditions. In the Early Bronze Age, the Kura-Araxes cultural complex (ca 3500–2500 BCE) is characterised by its distinctive red-black burnished pottery. Kura-Araxes communities lived in stable, agro-pastoral villages composed of small, uniform domestic units which all share similarities in internal organisation (Batiuk et al. 2022). Around the mid-third millennium, Kura-Araxes traditions rapidly disappeared and were replaced by communities with new material culture and lifeways. In northeastern Anatolia and the Caucasus, Early Kurgan cultures (Martkopi, Bedeni, ca 2500–2000BC) are noted for their ostentatious barrow burials under large funerary mounds (Sagona 2018). Rich grave goods in some of these kurgans suggest the emergence of elites and hierarchical societies; however, as associated settlements are virtually unknown, these populations are interpreted as having embraced a mainly mobile lifestyle. The end of the Kura-Araxes phenomenon and the emergence of Early Kurgan Cultures, together with the relationship between these cultural horizons, is poorly understood archaeologically and requires further investigation. This archaeobotanical project, funded by a BIAA study grant, is focusing on Kura-Araxes and Bedeni food production at the site of Rabati, Georgia, to explore the relationship between these two horizons by investigating whether there were continuities or changes in agricultural practice and subsistence.

Ancient Rabati lies on the northern edge of the modern village Zveli in Samtskhe-Javakheti province, southwest Georgia. It is a multiperiod mound (Chalcolithic–Medieval) at an altitude of 1480m above sea level, overlooking the deep gorge of the Kura River. To the south of Rabati, the plateau leads to highland pastures and the Turkish border in the Erusheti Mountains. Since 2016, Rabati has been excavated by a collaborative team from the Georgian National Museum and the University of Melbourne led by Giorgi Bedianashvili, the late Antonio Sagona and Andrew Jamieson. These excavations have uncovered a large Kura-Araxes stone building and a deep deposit of plaster lenses and ashy layers from the Bedeni period with evidence of textile production (Bedianashvili et al. 2019; Bedianashvili et al. 2022). Kura-Araxes occupation of the site has been radiocarbon dated to 3119–2630 cal BC and Bedeni to 2466–2026 cal BC (Bedianashvili et al 2021).

This season, excavations continued around a massive Early Bronze Age stone structure to try to define the Kura-Araxes building. The building's walls extend for over 20m in length, which suggests a complex and substantial architectural feature, whose function is still uncertain. Further excavations on the centre of the mound into the deep Early Kurgan deposits revealed two distinct phases clearly visible in the stratigraphy. These deposits provide a rare chance to examine the development of cultural practices and settlement structures throughout the Bedeni and Trialeti phases of the Early Kurgan period.

Rabati offers a unique opportunity to investigate agriculture and subsistence in the Early Kurgan period through archaeobotanical analysis of a rare settlement site. Moreover, because Rabati was occupied throughout the third millennium BC, it enables a comparison of Kura-Araxes and Early Kurgan agriculture and crop choices at the same site. Soil samples for archaeobotanical analysis were collected from all trenches and periods excavated this season and were processed by flotation at the dig house in Zveli. This year we processed over 40 samples totalling close to 1,000 litres of soil. The charred plant remains are currently being studied by the author at the University of Sheffield.

Initial analysis of the archaeobotanical material reveals that in the Kura-Araxes period, bread wheat (*Triticum aestivum*) and hulled barley (*Hordeum cf. distichum*) were present at Rabati. This is consistent with crops found at other Kura-Araxes sites, where free threshing wheat and hulled barley dominate, with few if any pulses (Hovsepian 2015; Longford 2015). In the Early Kurgan deposits, there is a greater diversity of crops found at Rabati together with bread wheat and hulled barley including emmer (*T. dicoccum*), einkorn (*T. monococcum*), lentil (*Lens culinaris*), pea (*Pisum sativum*), and bitter vetch (*Vicia ervilia*). In both periods, the presence of both barley and free threshing wheat chaff suggests that crops were cultivated near to the site, as this chaff is easily separated from the grain and removed after harvest when threshed. The cultivation of crops throughout the Kura-Araxes and Early Kurgan periods at Rabati would imply that some elements of these communities were present year-round to manage the fields. Due to the rarity and ephemeral nature of Early Kurgan sites, it is often assumed that the Bedeni were mobile pastoralists whose sites were only temporarily occupied. These initial results from Rabati, suggesting a permanent Bedeni settlement, potentially alter our interpretation of Early Kurgan societies. Continued analysis of the Rabati archaeobotanical material, including carbon and nitrogen stable isotope analysis, will examine these preliminary findings further to deepen our understanding of agriculture in the Kura-Araxes and Bedeni periods at Rabati.

Excavations at Rabati were funded by a Rustaveli Grant awarded to G. Bedianashvili and a Sagona bequest. Archaeobotanical fieldwork was funded by a BIAA study grant.

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View from the dig house (Cameron House) looking north at sunset towards Rabati



Archaeobotanical material from 2023 season at Rabati

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